

LAND APPLICATION SITE

GUERRY A. HIGGASON

EXGAH 1 – 8

ESSEX COUNTY

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 8-20-18 between Guerry A. Higginson referred to here as "Landowner", and Recyc Systems, Inc. referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Essex Co Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) with county documentation identifying owners, attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
<u>TM 41 Parcel 12,13</u>			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: ☒ The Landowner is the sole owner of the properties identified herein.
☐ The Landowner is one of multiple owners of the properties identified herein.

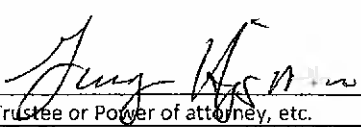
In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.


<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Printed name <u>GUERRY A. HIGGINSON</u>	Mailing Address <u>775 Smithfield School Rd.</u>	Landowner Signature 
By: <u>Owner</u>	<u>St. Stephens Church, Va. 23148</u>	
Title* <u>Owner</u>	Phone No. <u>804-366-0085</u>	
<input type="checkbox"/> I certify that I have authority to sign for the landowner as indicated by my title as executor, Trustee or Power of attorney, etc. <input type="checkbox"/> I certify that I am a responsible official [or officer] authorized to act on behalf of the following corporation, partnership, proprietorship, LLC, municipality, state or federal agency, etc.		

Permittee:

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

Printed name <u>Susan Trumbo</u>	Mailing Address <u>PO Box 562, Remington Virginia 22734</u>	Permittee- Authorized Representative Signature 
Title <u>Technical Manager</u>	Phone No. <u>540-547-3300</u>	

Permittee: Recyc Systems, Inc

County or City: Essex Co.

Landowner: Gervy A. Higgins

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Gervy A. Higgins
Landowner's Signature

8-20-18

Date


Gervy A. Higgins
Operator's Signature

775 Smithfield School Road
St. Stephens Church, Va. 23148
mailing address & phone

Date

FARM DATA SHEET

SITE NAME:	Guerry A. Higgason	COUNTY:	Essex
OWNER:	Guerry A. Higgason	OPERATOR:	Guerry Higgason Robert P. Longest
OWNER'S ADDRESS:	775 Smithfield School Rd. St. Stephens Church, VA 23148	OPERATOR'S ADDRESS:	Robert P. Longest 690 Canterbury Rd. St. Stephens Church, VA 23148
OWNER'S TELEPHONE:	804-366-0085	OPERATOR'S TELEPHONE:	-
GENERAL FARM TYPE:	Row Crops/ Hay	CELL PHONE:	804-445-5466
# CATTLE:	100 Alpaca	EMAIL:	-
LAGOON or SLURRY:	None	LATITUDE:	37.864
TOPO QUAD:	Aylett	LONGITUDE:	77.012
COMMENTS:	METHOD OF DETERMINATION: Online Maps		
Field #6 has been cleared.			
Field #8 to be cleared in the near future.			
Guerry Higgason Farms Fields #5-7.			
Robert P. Longest Farms Fields #1-4.			

SD 
10-9-18

RECYC SYSTEMS, INC

FIELD DATA SHEET

Field Identification	DEQ Control ID	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
			Water Table	Bed Rock/ Shallow	Surf/ Leach	Freq Flood			
EXGAH 1	51057-00020-0000	10.0	-	-	-	-	RA 61	41-12	T 2044 F 1, 8, 12
EXGAH 2	51057-00021-0000	7.4	-	-	-	-	RA 61	41-12	T 2044 F 3
EXGAH 3	51057-00022-0000	19.3	20D Nov.-Apr.	-	-	-	RA 61	41-12	T 2044 F 5
EXGAH 4	51057-00023-0000	8.7	-	-	-	-	RA 61	41-12	T 2044 F 2, 4
EXGAH 5	51057-00024-0000	8.4	-	-	-	-	RA 61	41-13	T 2043 F 6
EXGAH 6		6.0	20D Nov.-Apr.	-	-	-	RA 61	41-12 41-13	T 2044 F 0
EXGAH 7		6.3	-	-	-	-	RA 61	41-13	T 2043 F 3
EXGAH 8		16.5	20D Nov.-Apr.	-	-	-	RA 61	41-12	T 2044 F 0
TOTAL ACRES IN SITE		82.6							

10-9-18

**Guerry A Higgason
November 19, 2018**

Fields EXGAH 6, EXGAH 7, and EXGAH 8 are new fields

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Landowner Coordination Form

This form is used by the Permittee to identify properties (tax parcels) that are authorized to receive biosolids and/or industrial residuals, and each of the legal landowners of those tax parcels. A Land Application Agreement-Biosolids and Industrial Residuals from original signature must be attached for each legal landowner identified below prior to land application at the identified parcels.

Permittee: Recyc Systems, Inc

Site Name: Guerry A. Higgason

County or City: Essex Co.

Please Print

Signature not required on this page

[illegible]

Report Number: 14-098-1014

Account Number: 70594



www.aleastern.com

A&L Eastern Laboratories

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC
SUSAN TRUMBO
8455 WHITESHOP RD
CULPEPER VA 22701

Grower:
GARY HIGGASON
ESSEX CO

Submitted By: NED UPSHAW
Farm ID:

SOIL ANALYSIS REPORT

Analytical Method(s):

Mehlich 3

Date Received: 04/08/2014

Date Of Analysis: 04/09/2014

Date Of Report: 04/09/2014

Sample ID Field ID	Lab Number	Organic Matter			Phosphorus				Potassium		Magnesium		Calcium		Sodium		pH		Acidity	C.E.C
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Rate	Reserve ppm	Rate	K ppm	Rate	Mg ppm	Rate	Ca ppm	Rate	Na ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
1	23244	1.4	L	71	122	VH			63	L	50	L	829	H			6.8		0.1	4.9
2	23246	1.3	L	70	120	VH			45	L	48	L	684	VH			6.9		0.1	4.0
3	23247	1.9	L	80	114	VH			96	M	68	L	963	H			6.7		0.3	5.9
4	23248	1.9	L	81	101	VH			57	L	84	M	815	H			6.8		0.1	5.1
5	23249	1.4	L	73	82	H			51	L	108	VH	441	M			6.6		0.2	3.4

Sample ID Field ID	Percent Base Saturation					Nitrate		Sulfur		Zinc		Manganese		Iron		Copper		Boron		Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm	Rate	S ppm	Rate	Zn ppm	Rate	Mn ppm	Rate	Fe ppm	Rate	Cu ppm	Rate	B ppm	Rate	SS ms/cm	Cl ppm	Al ppm
1	3.3	8.5	84.6		2.9																	
2	2.9	10.0	85.5		1.4																	
3	4.2	9.6	81.6		4.5																	
4	2.9	13.7	79.9		2.9																	
5	3.8	26.5	64.9		6.0																	

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: A&L Eastern Laboratories, Inc.

by *Pauric McGeary*

Pauric McGeary

Report Number: 14-098-1014

Account Number: 70594



www.aleastern.com

A&L Eastern Laboratories

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC
SUSAN TRUMBO
8455 WHITESHOP RD
CULPEPER VA 22701

Grower:
GARY HIGGASON
ESSEX CO

Submitted By: NED UPSHAW
Farm ID:

SOIL ANALYSIS REPORT

Analytical Method(s):
Mehlich 3

Date Received: 04/08/2014

Date Of Analysis: 04/09/2014

Date Of Report: 04/09/2014

Sample ID Field ID	Lab Number	Organic Matter			Phosphorus		Potassium		Magnesium		Calcium		Sodium		pH		Acidity	C.E.C
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Reserve Rate	K ppm	Rate	Mg ppm	Rate	Ca ppm	Rate	Na ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
5B	23250	1.6	L	77	82	H	62	L	106	VH	368	M			6.4	6.90	0.3	3.2

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm	S Rate	Zn ppm	Mn Rate	Fe ppm	Cu Rate	B ppm	SS ms/cm	Cl Rate	Al ppm
5B	5.0	27.6	57.5		8.8										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: A&L Eastern Laboratories, Inc.

by: *Paucic McGroary*

Paucic McGroary

THE PLANNER IS NOT STATE CERTIFIED

***Nutrient Management Plan Balance Sheet
(Fall, 2018-Winter, 2020)
Guerry A. Higgason
Planner: John Doe***

Tract: 2043 Location: Essex

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
6/EXGAH 5(N)	8/8	2018	Fescue grass hay mt.	70-40-120	0/0				70-40-120	N/A			
3/EXGAH 7(N)	6/6	2018	Fescue grass hay mt.	70-50-95	0/0				70-50-95	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

Tract: 2044

Location: Essex

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
1, 8, 12/EXGAH 1(N)	10/10	2018	Wheat (grain)	100-20-80	20/0				80-20-80	N/A			
		2019	Wheat (grain)	100-20-80	20/0				80-20-80	N/A			
3/EXGAH 2(N)	7/7	2018	Wheat (grain)	100-20-80	20/0				80-20-80	N/A			
		2019	Wheat (grain)	100-20-80	20/0				80-20-80	N/A			
5/EXGAH 3(N)	19/19	2018	Wheat (grain)	100-20-60	0/0				100-20-60	N/A			
		2019	Wheat (grain)	100-20-60	0/0				100-20-60	N/A			
2, 4/EXGAH 4(N)	9/9	2018	Fescue grass hay mt.	70-40-110	0/0				70-40-110	N/A			
0/EXGAH 6(N)	6/6	2018	Fescue grass hay mt.	70-50-95	0/0				70-50-95	N/A			
0/EXGAH 8(N)	17/17	2018	Fescue hay estb.	40-130-130	0/0				40-130-130	N/A			
		2019	Fescue grass hay mt.	70-50-95	0/0				70-180-225	N/A			
		2020	Fescue grass hay mt.	70-50-95	0/0				70-230-320	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

Soil Test Summary

Tract	Field	Acre	Date	P2O5	K2O	Lab	Soil pH	Lime Date	rec. lime tons/Ac
2043	EXGAH 5	8	2014-Sp	H (82 P ppm)	L+ (51 K ppm)	A&L MIII	6.6		
2043	EXGAH 7	6	[No Test]						
2044	EXGAH 1	10	2014-Sp	H+ (122 P ppm)	M- (63 K ppm)	A&L MIII	6.8		
2044	EXGAH 2	7	2014-Sp	H+ (120 P ppm)	L+ (45 K ppm)	A&L MIII	6.9		
2044	EXGAH 3	19	2014-Sp	H+ (114 P ppm)	M (96 K ppm)	A&L MIII	6.7		
2044	EXGAH 4	9	2014-Sp	H (101 P ppm)	M- (57 K ppm)	A&L MIII	6.8		
2044	EXGAH 6	6	[No Test]						
2044	EXGAH 8	17	[No Test]						

Field Productivities for Major Crops

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
2043	2043/6	EXGAH 5	8	Suffolk	IIIb	II	Not Suited	III	
	2043/3	EXGAH 7	6	Suffolk	IIIb	II	Not Suited	III	
2044	2044/1, 8, 1	EXGAH 1	10	Suffolk	IIIb	II	Not Suited	III	
	2044/3	EXGAH 2	7	Suffolk	IIIb	II	Not Suited	III	
	2044/5	EXGAH 3	19	Kempsville	IIIa	II	Not Suited	III	
	2044/2, 4	EXGAH 4	9	Suffolk	IIIb	II	Not Suited	III	
	2044/0	EXGAH 6	6	Suffolk	IIIb	II	Not Suited	III	
	2044/0	EXGAH 8*	17	Rumford	IVb	III	Not Suited	III	High Leaching, High Slope

* Do not apply manure or biosolids more than 30 days prior to planting. Apply commercial fertilizer nitrogen to row crops in split spring applications.

Yield Range

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	>170	>80	>64	>6	>4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	<4	3.0-3.5
IV	100-130	50-60	40-48	NA	<3.0
V	<100	<50	<40	NA	NA

Farm Summary Report

Plan: New Plan Fall, 2018 - Winter, 2020

Farm Name: Guerry A. Higgason

Location: Essex

Specialist: John Doe

N-based Acres: 82.6

P-based Acres: 0.0

Tract Name: 2043

FSA Number: 2043

Location: Essex

Field Name: EXGAH 5

Total Acres: 8.40 Usable Acres: 8.40

FSA Number: 6

Tract: 2043

Location: Essex

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Sp-2014	6.6	H(82 P ppm)	L+(51 K ppm)	A&L Mill	

Soils:

PERCENT	SYMBOL	SOIL SERIES
---------	--------	-------------

100 23B Suffolk

Field Warnings:

Field Name: **EXGAH 7**

Total Acres: 6.30 Usable Acres: 6.30

FSA Number: 3

Tract: 2043

Location: Essex

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
100	23B Suffolk	

Field Warnings:

Tract Name: **2044**

FSA Number: 2044

Location: Essex

Field Name: **EXGAH 1**

Total Acres: 10.00 Usable Acres: 10.00

FSA Number: 1, 8, 12

Tract: 2044
Location: Essex
Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Sp-2014	6.8	H+(122 P ppm)	M-(63 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
16	9C	Emporia
84	23B	Suffolk

Field Warnings:

Field Name: EXGAH 2

Total Acres: 7.40 Usable Acres: 7.40

FSA Number: 3

Tract: 2044

Location: Essex

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Sp-2014	6.9	H+(120 P ppm)	L+(45 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
76	23B	Suffolk
24	9C	Emporia

Field Warnings:

Field Name: EXGAH 3

Total Acres: 19.30 Usable Acres: 19.30

FSA Number: 5

Tract: 2044

Location: Essex

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Sp-2014	6.7	H+(114 P ppm)	M(96 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
57	10B	Kempsville
13	10C	Kempsville
2	20D	Rumford Slagle
28	23B	Suffolk

Field Warnings:

Field Name: EXGAH 4

Total Acres: 8.70 Usable Acres: 8.70

FSA Number: 2, 4

Tract: 2044

Location: Essex

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Sp-2014	6.8	H(101 P ppm)	M-(57 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
94	23B	Suffolk
6	9C	Emporia

Field Warnings:**Field Name: EXGAH 6**

Total Acres: 6.00 Usable Acres: 6.00

FSA Number: 0

Tract: 2044

Location: Essex

Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
68	23B	Suffolk
15	20D	Rumford Slagle
17	10C	Kempsville

Field Warnings:

Field Name: EXGAH 8

Total Acres: 16.50 Usable Acres: 16.50

FSA Number: 0

Tract: 2044

Location: Essex

Slope Class: D Hydrologic Group: C

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
	[NO TEST]			

Soils:

PERCENT	SYMBOL	SOIL SERIES
78	20D	Rumford Slagle
13	10C	Kempsville
9	10B	Kempsville

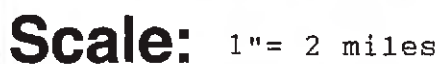
Field Warnings:

Environmentally Sensitive Soils due to:

Soils with potential for leaching based on soil texture or excessive drainage

Soils with percent slope in excess of 15%

M P

Inc.

EXGAH 1-8

10-9-18

VICINITY MAP



Inc. (Biosolids Land Application)

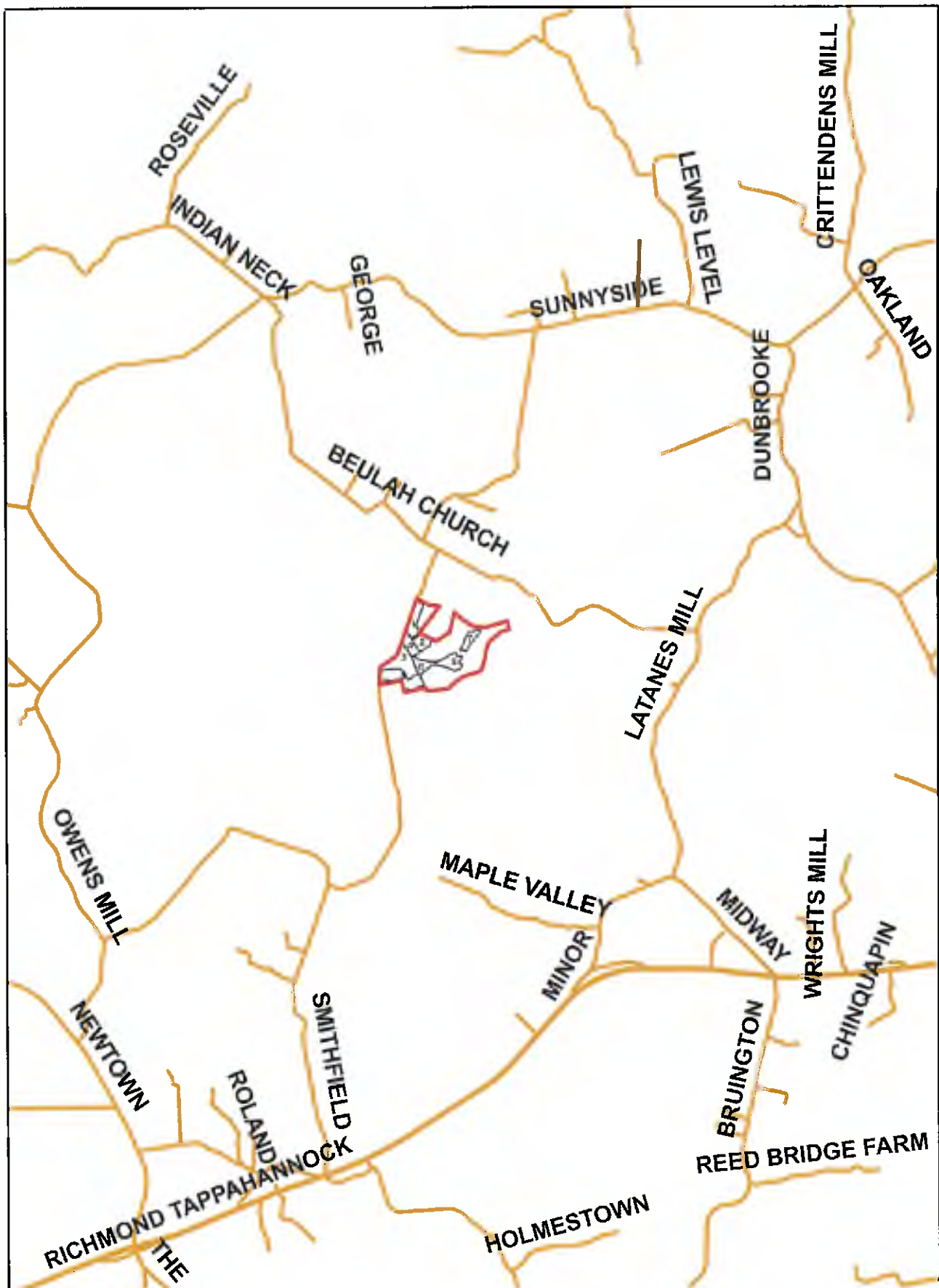


EXGAM 1-8

10-9-18

VICINITY MAP



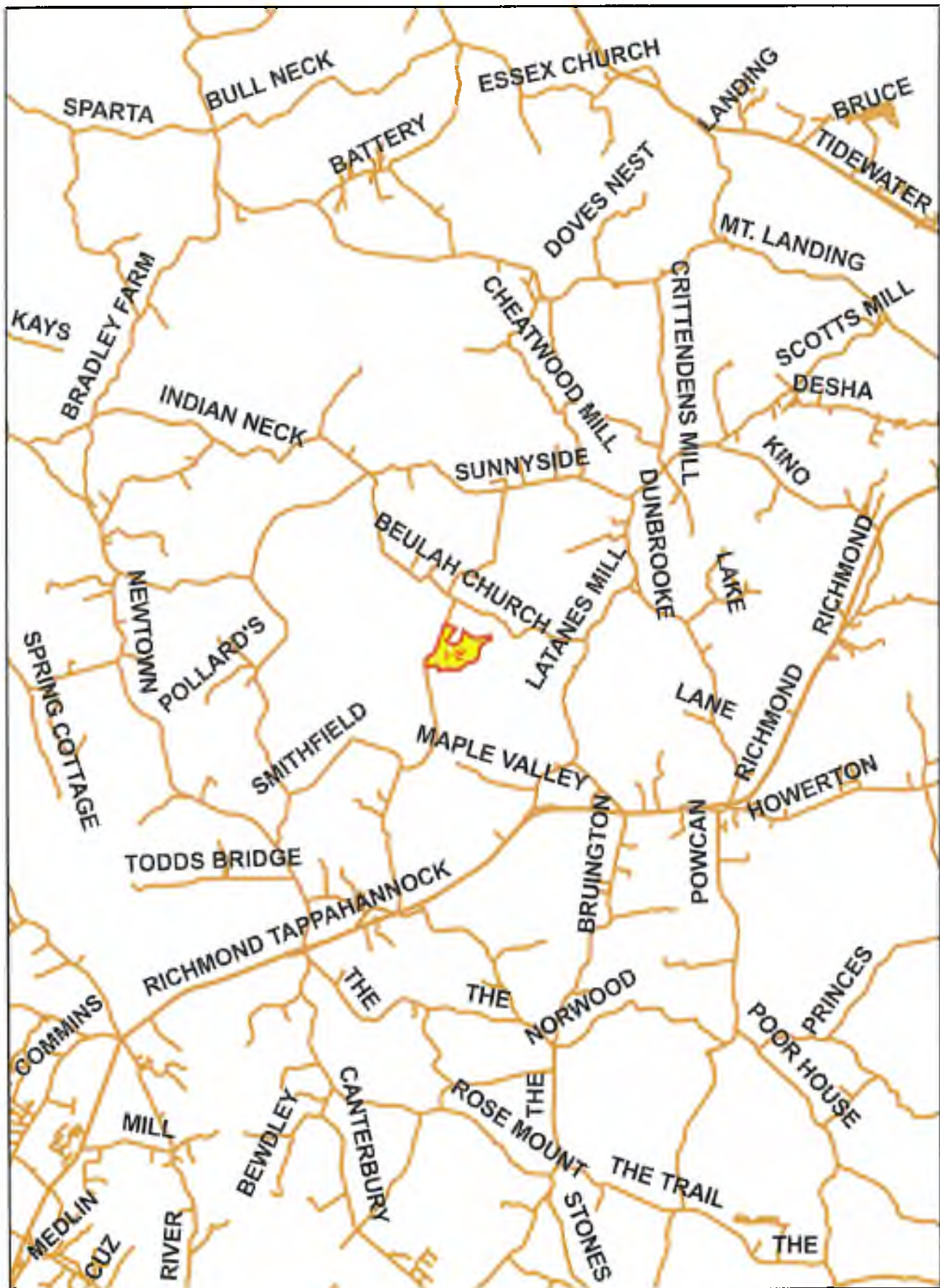


10-9-18

VICINITY MAP

1 in = 1 miles

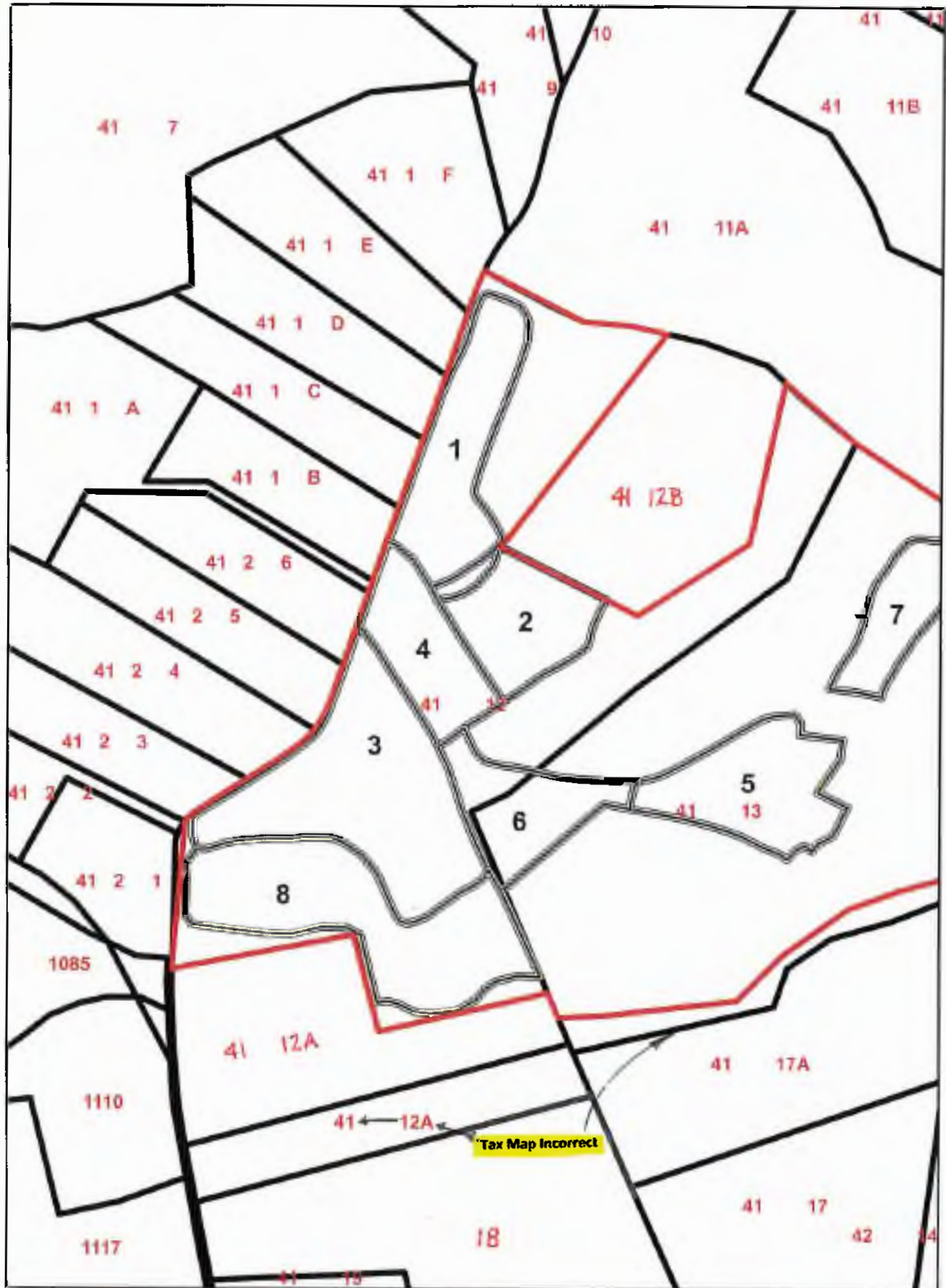




10-9-18

VICINITY MAP

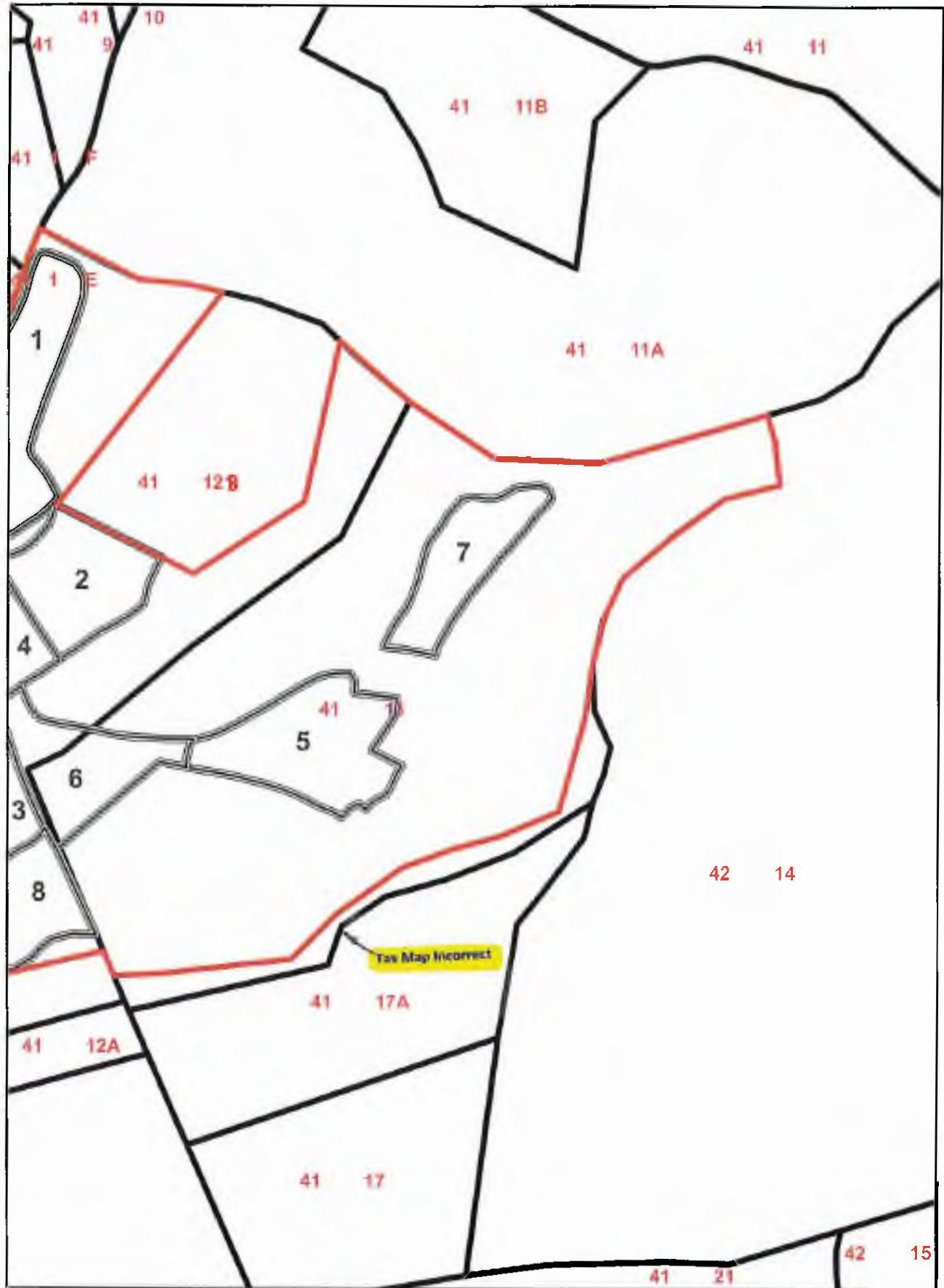
1 in = 2 miles



10-9-18

TAX MAP

1 in = 660 feet



10-9-18

TAX MAP

1 in = 660 feet

BOUNDARY LINE ADJUSTMENT SURVEY FOR

KENNETH W. WEST & MARY JANE WEST

CENTRAL MAGISTERIAL DISTRICT
ESSEX COUNTY, VIRGINIA

N/F WOODLAND, INC.
D.B. 227 p.757
P.B. 25 p.6

ESSEX COUNTY

KING & QUEEN COUNTY

TAX MAP # 41-12
GUERRY HIGGASON

P.B. 31 p.199
P.B. 24 p.80
PARCEL 1'

THE 10 ACRES SHOWN HERE IS TO BE SEPARATED
FROM TAX MAP # 41-12 AND ADDED TO TAX MAP # 41-12A;
IT IS NOT TO BE CONSIDERED A SEPARATE PARCEL.

10.00 Acres
TO BE ADDED TO THE OTHER
LANDS OF KENNETH W. WEST &
MARY JANE WEST

PARCEL 4'

41-12A

R=3209.52'
A=143.18'
CH=N 10°27'53" E 143.17'

EXISTING BOUNDARY
FOUND ROD

R=3209.52'
A=238.92'
CH=S 70°25'1" W 238.92'

TAX MAP # 41-12A
KENNETH W. WEST &
MARY JANE WEST
INSTR. NO. 080000997
P.B. 24, p.80
PARCEL 3'

TAX MAP # 41-18
JONAH W. BROOKS &
STELLA B. BROOKS
D.B. 145 p.409

TAX MAP # 41-13
GUERRY HIGGASON

NO FIELD WORK WAS DONE
ON EXISTING BOUNDARY
LINES AT THIS TIME.

TAX MAP # 41-17A
BROOKS FARM II, L.L.C.
INSTR. NO. 080000546

CERTIFICATE OF APPROVAL
Survey of land shown hereon is hereby
certified as correct in accordance with
the laws and may be committed to record.

Survey Agent
Essex County, Virginia

RECORDED
FEB 10, 2013
F. HAILE
F. Haile
10. 3221

Recorded
Filed in the Clerk's Office
Clerk
Essex County, Virginia
20 14

ACREAGE SUMMARY
PARCEL 3' = 10.00 Ac.
PARCEL 4' = 10.00 Ac.
TAX MAP # 41-12A = 20.00 Acres by addition
PARCEL 1' = 117.27 Ac.
PARCEL 4' = 10.00 Ac.
TAX MAP # 41-12 = 101.27 Acres by subtraction

0 200'

EASTERN LAND SURVEYING LLC

7840 RICHMOND-TAPPAHANNOCK HWY SUITE 300
AYLETT, VA 23009-3056 PHONE 804-445-6555

TPC NO: 2013-11	SCALE: 200 F/In
JOB NO: 101-42	FILE NO: 13
TAX MAP NO: PART OF 41-12	DATE: NOVEMBER 14, 2013

MERIDIA

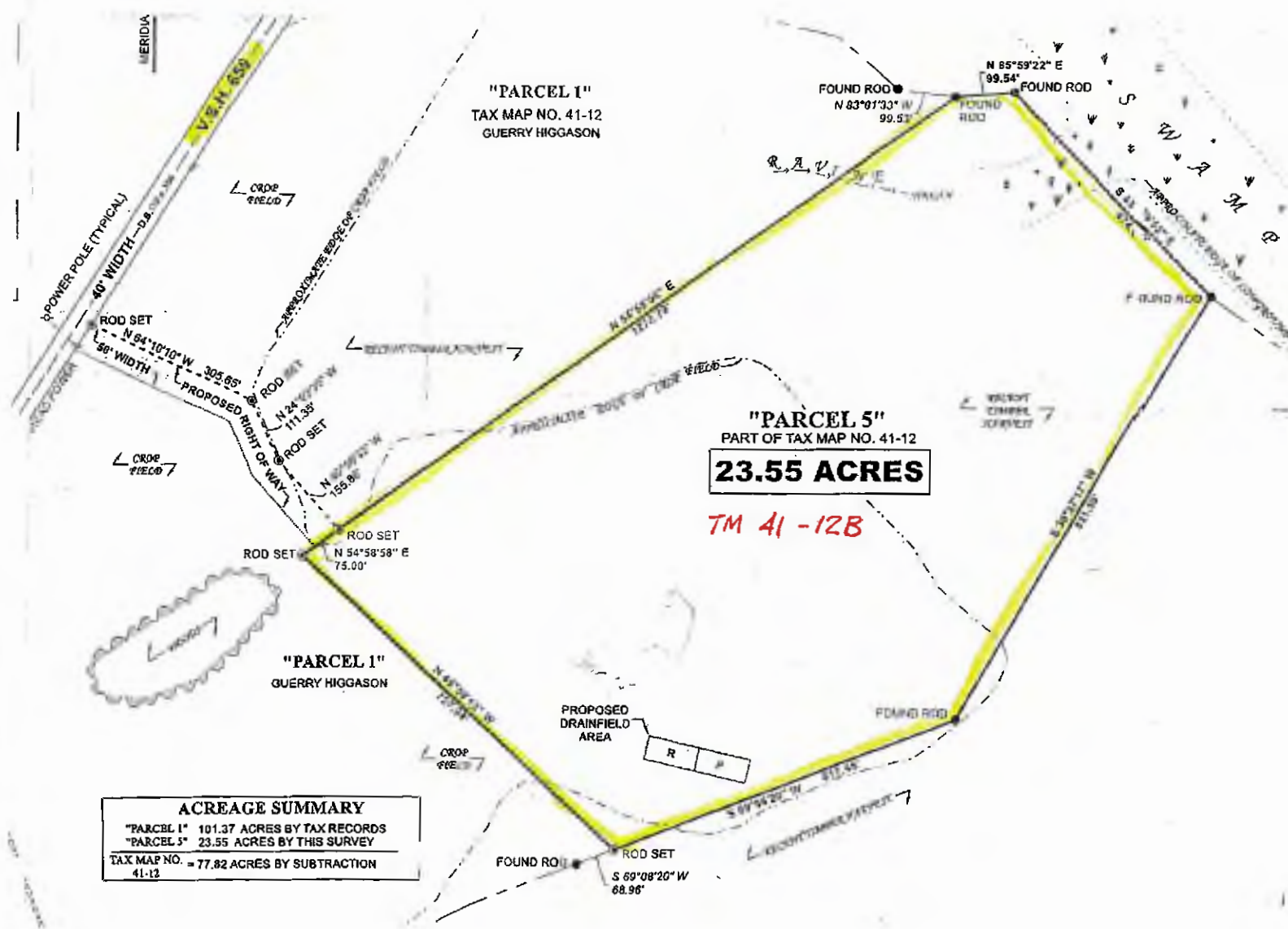
"PARCEL 1"
TAX MAP NO. 41-12
GUERRY HIGGASON

"PARCEL 5"
PART OF TAX MAP NO. 41-12
23.55 ACRES

TM 41-12B

"PARCEL 1"
GUERRY HIGGASON

ACREAGE SUMMARY	
"PARCEL 1"	101.37 ACRES BY TAX RECORDS
"PARCEL 5"	23.55 ACRES BY THIS SURVEY
<hr/>	
TAX MAP NO. 41-12	= 77.82 ACRES BY SUBTRACTION



ADJOINING LANDOWNERS

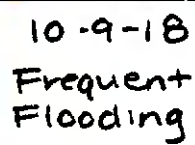
Guerry A. Higgason

ESSEX COUNTY

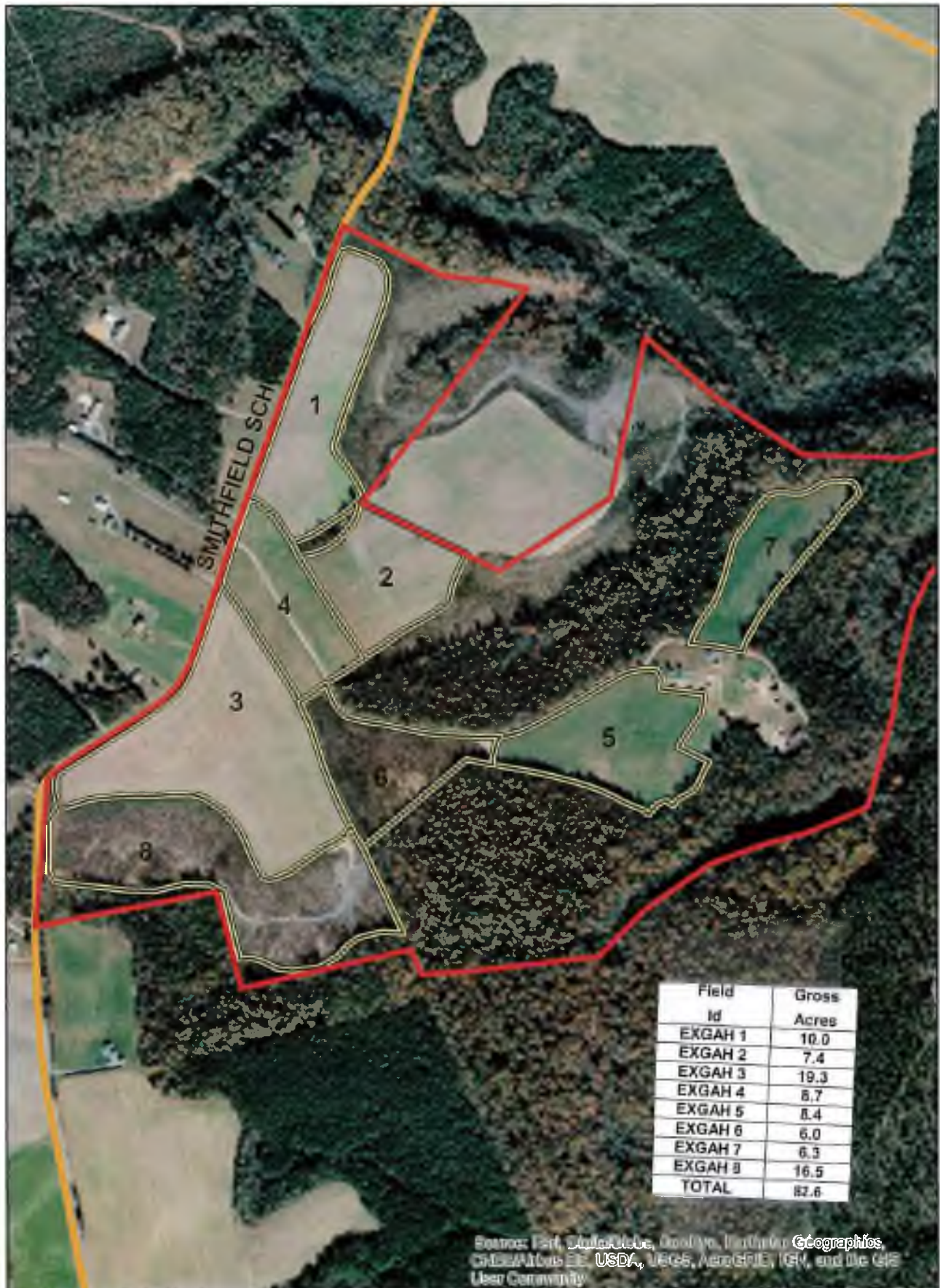
Tax Map	Parcel #	Owner Name(s)
41	9	Jamestown Forestlands LLC
	11A	Brooks Farm LLC
	12A	Kenneth W. West
	12B	Glen Wayne Kirby
	17A	Brooks Farm LLC
	18	Jonah W. Brooks et. ux.
41-1	A	William D. Smith
	B	Linwood J. Health
	C	Yvonne Thomas Burrell
	D	Thomas Gallaway, Jr.
	E	Joseph W. Krevonick
	F	Arden Jurista
41-2	1	Richard William Messinger
	2	Wayne D. Miles, Jr.
	3	John E. Pullin
	4	James A. Perry
	5	Robert M. Sydnor
	6	Samantha Downing
42	14	Arthur Temple III Estate
KING & QUEEN COUNTY		
32-57L	1118	John W. Wilson
	1118B	John W. Wilson
	1124A	John W. Wilson



A topographic map of the Smithfield School area. The map features contour lines indicating elevation, with labels such as 9B, 19E, 200, 23B, 3A, 10A, 10B, 21C, and 98. A prominent orange line runs diagonally across the map, likely representing a road or boundary. The Smithfield School is labeled vertically along a road. Eight numbered locations (1 through 8) are marked on the map, mostly within the school grounds. The Beulah Church is labeled in the upper right corner. The map also shows various other geographical features and labels like 10C, 23A, and 23E.



1 in = 660 feet



10-9-18

AERIAL MAP

1 in = 660 feet



United States
Department of
Agriculture

Essex County, Virginia

Tract 2044

Farm 2845



2018 Program Year

Map Created May 15, 2018

Common Land Unit

- Non-Cropland
- Cropland
- rcl_va057
- Tract Boundary

NAIP/USDA_CONUS_PRIME

RGB

- Red: Band_1
- Green: Band_2
- Blue: Band_3

Wetland Determination Identifiers

- Restricted Use
- Limited Restrictions
- Exempt from Conservation
- Compliance Provisions

Tract Cropland Total: 42.94 acres

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).



United States
Department of
Agriculture

Essex County, Virginia

Tract 2043

Farm 2868



2018 Program Year

Map Created May 15, 2018

Common Land Unit

Non-Cropland

Cropland

rcl_l_va057

Tract Boundary

NAIP\USDA_CONUS_PRIME

RGB

Red: Band_1

Green: Band_2

Blue: Band_3

Wetland Determination Identifiers

Restricted Use

Limited Restrictions

Exempt from Conservation
Compliance Provisions

Tract Cropland Total: 14.71 acres

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS)
















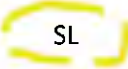


Untitled Map

Write a description for your map.

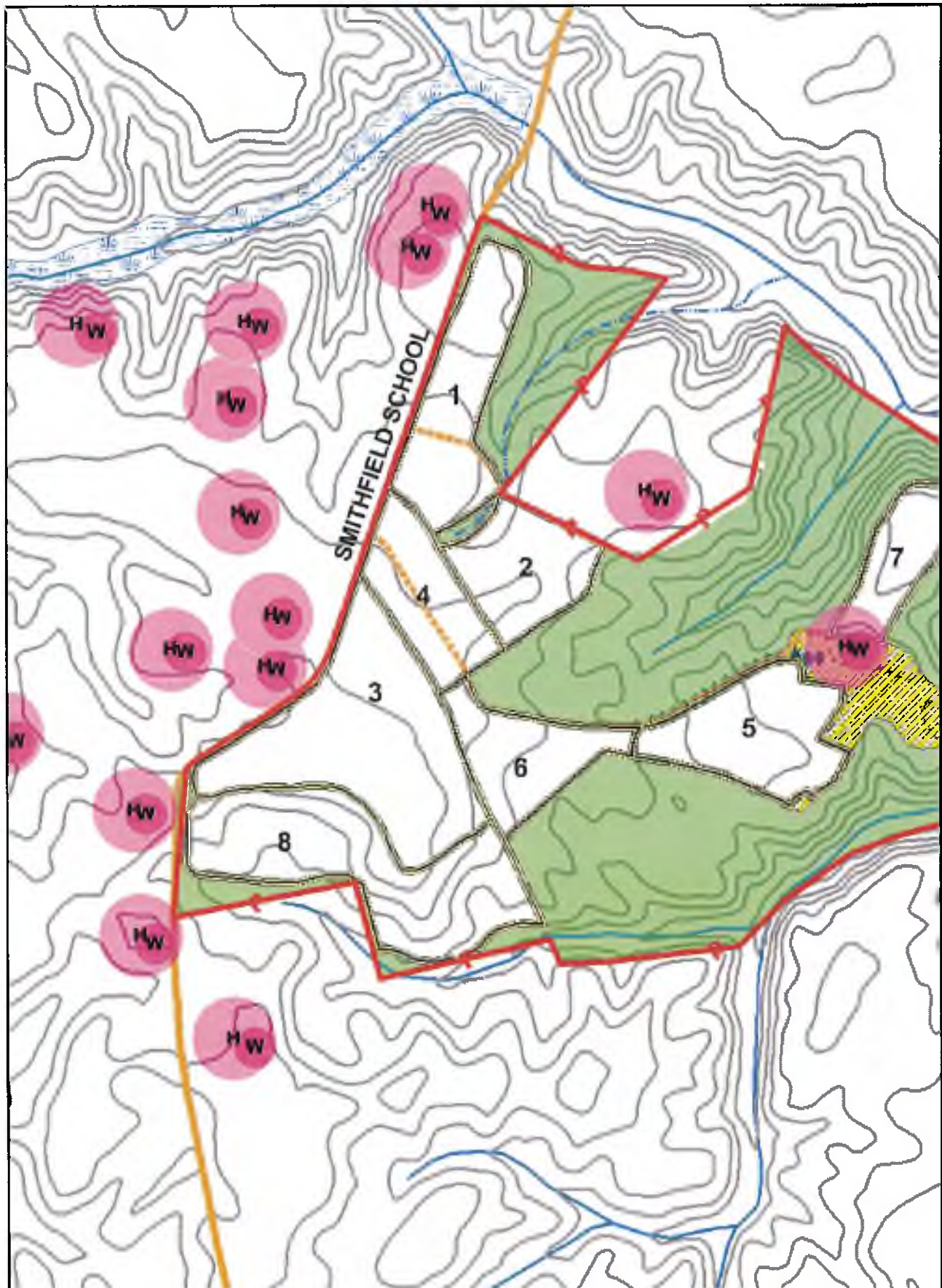
Legend



Legend For Site Plan

Symbol	Feature	Minimum Setback
	House and Well	200 feet from occupied dwelling * 100 feet from water supply wells or springs
 	Well or Spring	100 feet from water supply wells or springs
	Streams or Surface Water	35 feet with 35 foot vegetated buffer 100 feet without vegetated buffer
	Wet Spot	
	Trees and Woods	
	Private Drive	
	Rock Area/Rock Outcrop	25 feet from rock outcrops 50 feet from limestone rock outcrops
	Severely Eroded Spot	18 Inch minimum depth of soil
  	Sink Hole	100 feet from open sinkholes 50 feet from closed sinkholes
	State Road	10 feet from side of roadway
	Fence / Field Boundary	
	Property Line	100 feet from property line *
 	Slope	15% maximum
	Hashed out Area	No application

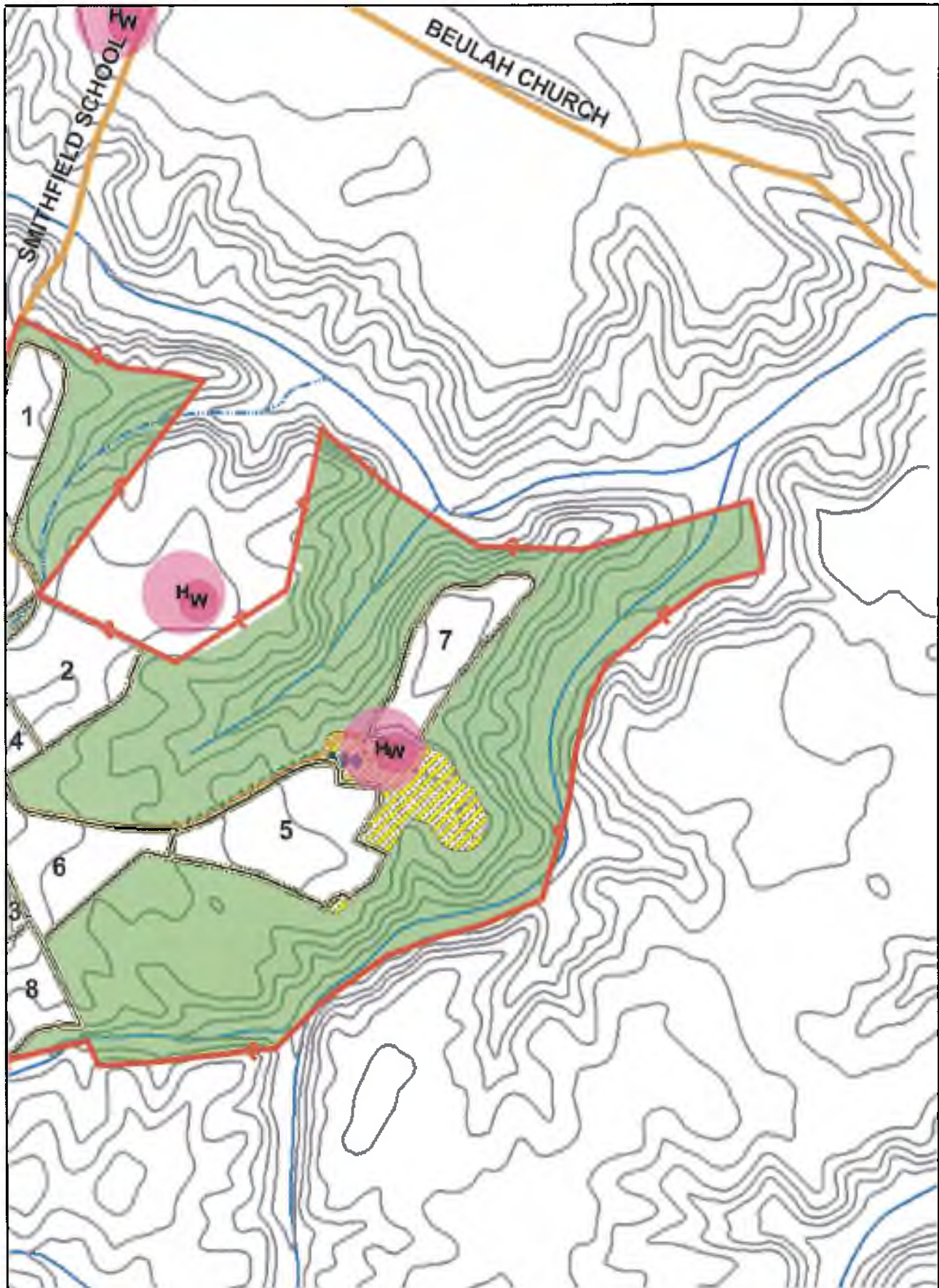
*Buffer can be reduced or waived upon written consent from landowner.



10-9-18

SITE PLAN

1 in = 660 feet



SMITHFIELD SCHOOL HW

BEULAH CHURCH

Hw

Hw

1

2

4

7

5

6

3

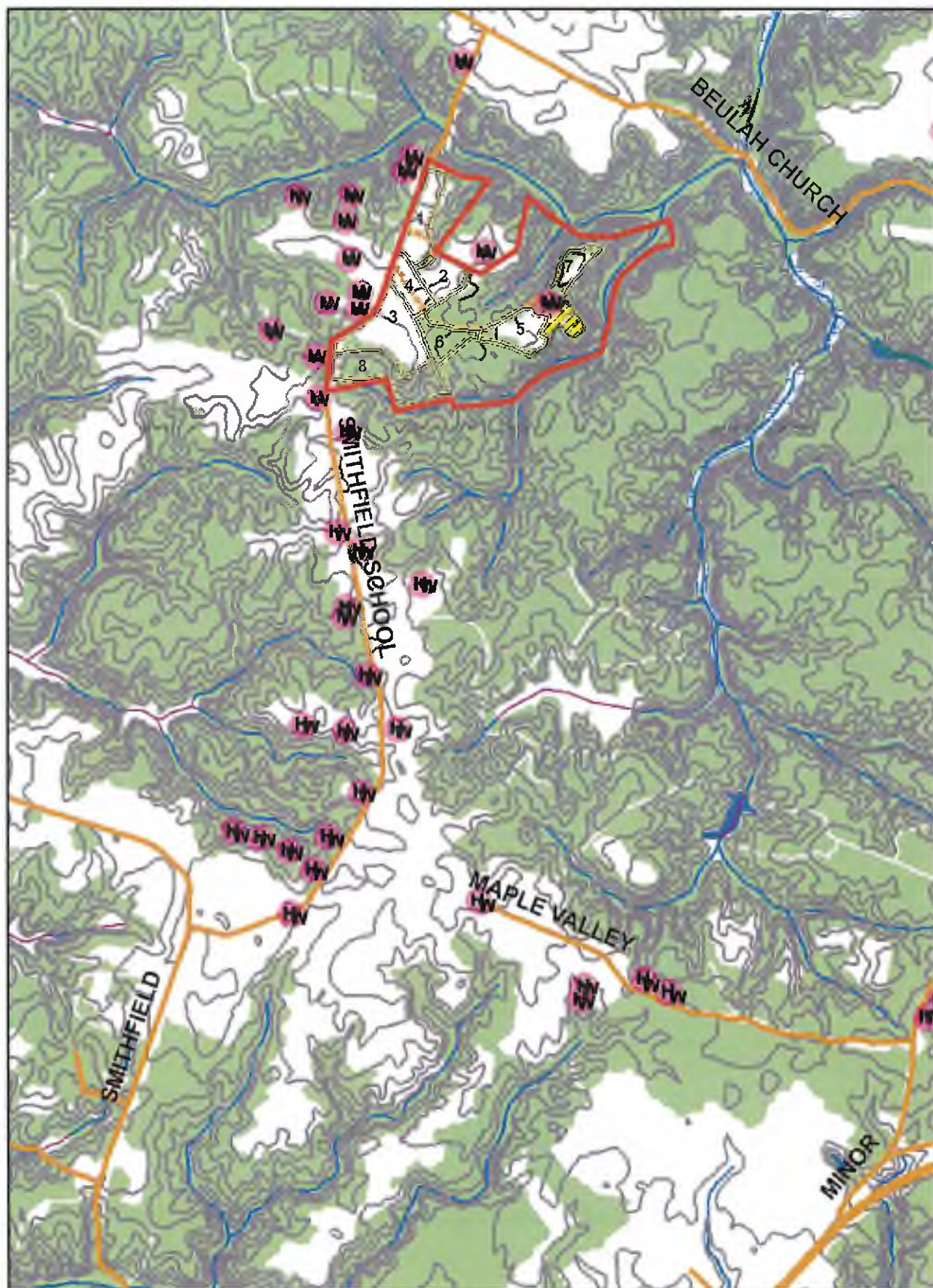
8

10-9-18

SITE PLAN

1 in = 660 feet





10-9-18

TOPOGRAPHIC MAP

1 in = 2,000 feet

